

ABSTRACT

The present invention relates to a novel enzyme that allows peptide to be produced easily, inexpensively and at high yield without going through a complex synthesis method. More particularly, the present invention provides a novel enzyme that catalyzes a peptide-producing reaction from a carboxy component and an amine component, a microbe that produces the enzyme, and a method for inexpensive production of peptides using this enzyme or microbe. The novel enzyme that efficiently produces peptide was discovered from a newly discovered microbe belonging to the genus *Empedobacter*, and a method was found that allows peptides to be produced inexpensively and easily.